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The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** DAREN ALLEE

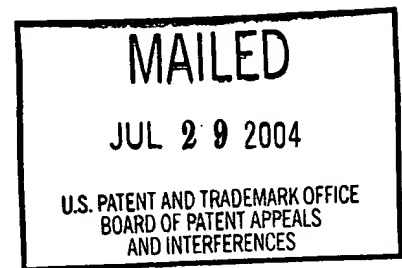
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Appeal 2003-0163  
Application No. 09/400,508

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ON BRIEF

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Before THOMAS, BARRETT, and DIXON, **Administrative Patent Judges**.  
DIXON, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-16,  
which are all of the claims pending in this application.

We AFFIRM.

Appellant's invention relates to a low noise logic gate. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A logic gate, comprising:

a low noise current source coupled between a first terminal of a voltage supply and an output terminal, said low noise current source being capable of delivering a preselected voltage signal to said output terminal having a magnitude responsive to a first control signal relatively independent of the magnitude of the voltage on said first terminal of said voltage supply; and

at least one switching element coupled between the output terminal and a second terminal of the voltage supply, said switching element being capable of coupling said output terminal to said second terminal of said voltage supply in response to receiving a control signal.

The prior art of record relied upon by the examiner in rejecting the appealed claims is as follows:

|                      |           |  |
|----------------------|-----------|--|
| Sundstrom            | 5,602,494 | Feb. 11, 1997                          |
| Chang et al. (Chang) | 5,955,893 | Sep. 21, 1999<br>(filed Dec. 16, 1996) |
| Lee                  | 6,078,194 | Jun. 20, 2000<br>(filed Nov. 13, 1995) |

Claim 1 stands rejected under 35 U.S.C. § 102 as being anticipated by Lee. Claims 2 and 16<sup>1</sup> stands rejected under 35 U.S.C. § 103 as being unpatentable over Lee. Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Lee in view of Chang. Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over Lee in view of Thompson. Claim 5 stands rejected under 35 U.S.C. § 103 as being unpatentable over Lee in view of Sundstrom. Claims 6-15 stand rejected under the same bases as the above rejections of claims 1-5 and 16. See answer at pages 8 and 9.<sup>2</sup>

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 13, mailed May 10, 2002) for the examiner's reasoning in support of the rejections, and to appellant's brief (Paper No. 12, filed Feb. 27, 2002) and reply brief (Paper No. 14, filed Jul. 16, 2002) for appellant's arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the

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<sup>1</sup> The examiner has not specifically rejected claim 16 in the answer, but did include a separate rejection in the final rejection for claim 16. Appellant acknowledges the status of claim 16 in the Brief at page 3 as being rejected. The examiner has not indicated that the rejection has been withdrawn. Therefore, we will treat claim 16 as being rejected as set forth in the final at page 4.

<sup>2</sup> While we do not sanction the examiner's brevity and abbreviated statement of the grounds of rejection, we find this issue moot since appellant elected to group all claims as standing or falling together at page 5 of the brief.

respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

At the outset, we note that appellant contends that the claims stand or fall independently. (Brief at page 5.) Therefore, we will select a single representative claim with respect to each ground of rejection, except for the instances in which appellants have presented separate arguments. **See 37 CFR § 1.192(c)(7). See also In re McDaniel**, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) ("If the brief fails to meet either requirement [of 37 CFR § 1.192(c)(7)], the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim.").

### **35 USC § 102**

In determining novelty, the first inquiry must be into exactly what the claims define. **In re Wilder**, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). Similarly, a Section 103 analysis begins with a key legal question -- what is the invention claimed? **Panduit Corp. v. Dennison Mfg. Co.**, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987).

The terms used in the claims bear a "heavy presumption" that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art. **Texas Digital Sys., Inc. v. Telegenix Inc.**, 308

F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002). Dictionaries, encyclopedias, and treatises are particularly useful resources in determining the ordinary and customary meanings of claim terms. *Id.* at 1202, 64 USPQ2d at 1818. Indeed, these materials may be the most meaningful sources of information in better understanding both the technology and the terminology used by those skilled in the art to describe the technology. *Id.* at 1203, 64 USPQ2d at 1818. In the instant case, all the independent claims contain the terms "low noise current source" and "relatively independent."

There is no evidence in the record that the terms "low noise current source" and "relatively independent" had any special meaning to the artisan at the time of disclosure. Nor do we find any particular definition of the terms in the instant specification. **See In re Paulsen**, 30 F.3d 1475, 1480, 31 USPQ2d 1671, 1674 (Fed. Cir. 1994) (repeating the principle that where an inventor chooses to be his own lexicographer and gives terms uncommon meanings, he must set out the uncommon definition in the patent disclosure). **See also Beachcombers Int'l. Inc. v. WildeWood Creative Prods., Inc.**, 31 F.3d 1154, 1158, 31 USPQ2d 1653, 1656 (Fed. Cir. 1994) ("As we have repeatedly said, a patentee can be his own lexicographer provided the patentee's definition, to the extent it differs from the conventional definition, is clearly

set forth in the specification."); **Johnson Worldwide Assocs. Inc. v. Zebco Corp.**, 175 F.3d 985, 989, 50 USPQ2d 1607, 1610 (Fed. Cir. 1999) (there is a "heavy presumption" that claim language has its ordinary meaning).

With respect to independent claim 1, we find that the examiner has established a *prima facie* case of anticipation, and identified of correlation of each claimed element to the disclosure of Lee. The examiner has maintained that the above language with respect to "relatively independent" is vague and presumes that there is a relative dependency as well. (See brief at page 6.) We agree with the examiner, but would rather categorize the claim language as broad rather than vague. In our interpretation of the limitation, there is both a relative dependence and independence of the voltage output from the low noise current source. The language of independent claim 1 states that "low noise current source coupled between a first terminal of a voltage supply and an output terminal, said low noise current source being capable of delivering a preselected voltage signal to said output terminal having a magnitude responsive to a first control signal relatively independent of the magnitude of the voltage on said first terminal of said voltage supply." Here, we find the language of the claim to be rather broad in that it does not state a range or other limitation which would define the relationship between the supply voltage and the output in the express language of the claim. From our review of the specification, we find no express definition of the phrase "relatively independent." Therefore, we are left with the ordinary meaning of the phrase

which we find to be both independent and dependent. Therefore, this argument is not persuasive.

Appellant argues that it is well known that variations in the supply voltage propagate through the system to the control voltages and that the control voltages draw power from the power plane and that any variation in the voltage on the power planes leads to some variation in the voltage supplied to the control signals and that therefore if there is a droop in the supply voltage then there is a droop in the control voltage. Appellant further argues that “[u]ndesired changes to the input control signal and the power supply typically lead to undesired changes in the output signal, but the present invention moderates or eliminates the effect of those undesired changes.” [Emphasis added.] (See brief at page 7.) While we agree with appellant of what is known in the art, this does not specifically address the teachings of Lee nor does it establish that there is not some independence. Here, we find that appellant has set forth the desired end result in broad claim language which we find to be met by the teachings of Lee. Furthermore, appellant argues the limitations broadly and in general terms only addresses the specific teachings of Lee. Therefore, we do not find appellant’s arguments persuasive.

Appellant argues that there is at least one factor that contributes to the independence of the output of the current source relative to the supply voltage is the use of a “p-type transistor (66 or 84) when the voltage supply (62) is a positive voltage.”

(See brief at page 7.) We find no limitation in the language of independent claim 1 that requires a p-type transistor or that the supply voltage be positive. Therefore, this argument is not persuasive.

Appellants argue that Lee does not teach or suggest "controlling noise as with the present invention." (See brief at page 8.) We find no limitation in the language of independent claim 1 that requires controlling noise. Claim 1 merely recites a "low noise current supply" without reciting any limitation to achieve this function. Therefore, this argument is not persuasive. Appellant argues that Lee discloses an output voltage that is very dependent on the supply voltage, but as discussed above, we find these terms to be broad and within the teachings of Lee.

Appellant disagrees with the examiner's position that if the n-type transistor of Lee were replaced with a p-type transistor the system would operate "relatively independent". We do not reach this argument with respect to independent claim 1 since the claim does not recite a p-type transistor. Therefore, this argument is not persuasive, and we will sustain the rejection of independent claim 1.

### **35 USC § 103**

With respect to dependent claim 2, we find the examiner's line of reasoning to replace a n-type transistor with a p-type transistor to be well within the knowledge and level of skill of one of ordinary skill in the art and that those skilled in the art would have known the respective changes that would have to be made for proper operation of the



p-type circuit. Appellant argues that the substitution would cause significant misoperation of the circuit in Lee. (See brief at page 10.) We disagree and find this change within the level of ordinary skill in the art. Therefore, this argument is not persuasive, and we will sustain the rejection of dependent claim 2. Therefore, the remainder of claims 3-16 should similarly fall with claim 2 since appellant elected to group all the claims as standing or falling together. (See brief at page 5.) But, appellant has included a specific argument to independent claim 6 at page 11 of the brief. Therefore, we will address this argument.

Appellant argues that claim 6 recites that the current source has an "intrinsic transistor" and that the specification teaches the significant benefits of enhancing independence. Here, we find that appellant's argument adds further support to the broad claim interpretation given to independent claim 1 since the limitation to an intrinsic transistor is not recited until dependent claim 3. Therefore, claim 1 is entitled to a broader interpretation than independent claim 6. But for claim 6 the examiner has relied upon the teaching of Chang with respect to the suggestion to use an intrinsic transistor. Appellant argues that Chang does not suggest modifying the n-type transistor of Lee to a p-type transistor. (See brief at page 11.) Again, we find no limitation in the language of the claim that requires a p-type transistor. We find that the language of the claim is generic to either a p-type or n-type transistor. Therefore, this argument is not persuasive. Appellant argues that the examiner's rejection is based

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upon improper hindsight reconstruction. We disagree with appellant and find that the examiner's rejection is based upon a broad and correct interpretation of the language of the claims discussed above. Therefore, we will also sustain the rejection of independent claim 6 and the claims that depend therefrom.

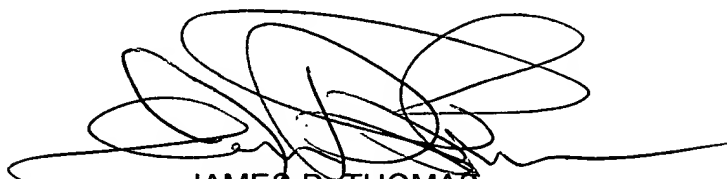
### **CONCLUSION**

To summarize, the decision of the examiner to reject claim 1 under 35 U.S.C. § 102 is affirmed, and the decision of the examiner to reject claims 2-16 under 35 U.S.C. § 103 is affirmed.

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No time period for taking any subsequent action in connection with this appeal  
may be extended under 37 CFR § 1.136(a).

AFFIRMED

  
JAMES D. THOMAS  
Administrative Patent Judge

  
LEE E. BARRETT  
Administrative Patent Judge

  
JOSEPH L. DIXON  
Administrative Patent Judge

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